# FACTS ABOUT PRIVATE AND GOVERNMENT EMPLOYMENT AND WAGES

This report provides information about private and government employment and wages in the Montana economy, with a focus on separating out state government employment from other levels of government workers in order to examine the wage differential between private and state government employees.

In a free labor market, where workers are paid based on market dynamics and where workers are easily able to move between the private and public sectors, market forces will cause private and government compensation to equalize. This report illustrates that market-based economic theory holds true in Montana's labor market, finding little pay differential between employment classes after adjustments for occupational differences. When adjusting for differences in education and skill levels required for each job, highly skilled workers in the private sector earn significantly more than their public sector counterparts, while government compensation is comparatively higher in low-skill occupations. These findings are consistent with other research.

## SIZE OF THE GOVERNMENT SECTOR IN MONTANA

Montana employment from 2001 to 2009 (the most recent year of data) by class is shown in Figure 1 (next page). Government employment represented about 19.6% of Montana's employment in 2009. The government employment share of total employment has been decreasing in the long-term from over 20% in 2001 to 18.5% in 2008. However, the private sector job loss during the recession has increased the share of government employment from 2008 to 2009. This change is likely to be temporary. Government employment follows counter-cyclical patterns with faster growth during recessionary periods due to the increased need of counter-cyclical social programs like unemployment insurance benefits. Counter-cyclical programs and employment help stabilize the economy during downturns and allow the economy to recover more quickly. As the economy recovers, government growth will slow while private employment growth will regain its rapid pace, thus decreasing the government employment share. In fact, employment estimates for November 2010 indicate that government has lost all employment gained during the recession, and is now at the lowest level since

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**Figure 1. Montana Employment by Class, 2001 to 2009**

| | Private Employment | Government Employment | Total Employment | Government as a Share of Total Employment | State Government Employment |
|---|---|---|---|---|---|
| 2001 | 306,790 | 77,115 | 383,905 | 20.1% | 19,991 |
| 2002 | 310,388 | 77,773 | 388,161 | 20.0% | 20,147 |
| 2003 | 314,240 | 79,301 | 393,541 | 20.2% | 20,797 |
| 2004 | 323,727 | 79,705 | 403,432 | 19.8% | 20,740 |
| 2005 | 334,143 | 79,317 | 413,460 | 19.2% | 21,254 |
| 2006 | 346,275 | 79,907 | 426,182 | 18.7% | 21,697 |
| 2007 | 356,725 | 79,931 | 436,656 | 18.3% | 21,597 |
| 2008 | 356,638 | 80,953 | 437,591 | 18.5% | 21,756 |
| 2009 | 338,854 | 82,712 | 421,566 | 19.6% | 22,059 |
| **Compounding Annual Growth Rates** | | | | | |
| 2001-2009 | 1.25% | 0.88% | 1.18% | | 1.24% |
| 2001-2007 | 2.55% | 0.60% | 2.17% | | 1.30% |
| 2007-2009 | -2.54% | 1.72% | -1.74% | | 1.06% |

Source: Quarterly Census of Employment and Wages

October 2006. Government employment peaked in March 2010 and has since lost over 5,000 employees through November 2010.[1] Employment decreases in 2010 occurred at all levels of government, including state government.

During the full time period of 2001-2009, state government employment grew at roughly the same pace as private employment and faster than total government employment. During the recession from 2007 to 2009, employment growth slowed in both state government and the private sector, with state government growing at a pace of 1.06% per year. Federal and local government employment grew at the fastest rates, largely because of increased federal employment due to the Census and stimulus funding. As mentioned earlier, the most current employment estimates indicate that government employment decreased during 2010 and is now below the pre-recession employment level. The 2010 employment level will not be confirmed until May 2011.

## MONTANA PRIVATE AND GOVERNMENT EMPLOYMENT BY INDUSTRY

In terms of industry, the Retail and Wholesale Trade sector employs the largest number of workers in Montana, with 17% of total payroll employment. Health Care and Leisure Activities (which includes Accommodations, Food Service, Arts, Recreation, and Entertainment businesses) are also large employers, comprising of 15% and 14% of total employment respectively. Figure 2 shows the 2009 Montana employment by class and industry.

[1]Current Employment Statistics, Bureau of Labor Statistics for November 2011.

**Figure 2. Montana Payroll Employment by Class and Industry, 2009**

| | Total Employment | Private Employment | Goverment Employment | Industry Share of Total Employment | Industry Share of Private Employment |
|---|---|---|---|---|---|
| Agriculture, Mining, and Utilities | 14,070 | 13,790 | 280 | 3% | 4% |
| Construction | 26,130 | 23,960 | 2,170 | 6% | 7% |
| Manufacturing | 17,400 | 17,400 | - | 4% | 5% |
| Retail and Wholesale Trade | 71,620 | 71,540 | 80 | 17% | 21% |
| Transportation | 13,210 | 10,330 | 2,880 | 3% | 3% |
| Information, Finance, and Real Estate | 28,800 | 28,270 | 530 | 7% | 8% |
| Management and Professional Services | 20,500 | 20,270 | 230 | 5% | 6% |
| Administration and Business Support Services | 18,470 | 18,470 | - | 4% | 5% |
| Education | 38,670 | 4,030 | 34,640 | 9% | 1% |
| Health Care | 61,570 | 57,900 | 3,670 | 15% | 17% |
| Leisure Activities | 57,610 | 56,790 | 820 | 14% | 17% |
| Other Services | 16,030 | 16,000 | 30 | 4% | 5% |
| Public Administration | 37,420 | | 37,420 | 9% | |
| **Total** | **421,500** | **338,750** | **82,750** | | |

Source: Quarterly Census of Employment and Wages

Government employment falls within many industries, particularly in Education, Public Administration, and Health Care. The total number of government workers is roughly equal to the number of workers employed in the Trade and Transportation sector (a combination of the Trade industry and the Transportation industry). In 2009, the total number of government workers was slightly greater than employment in the Trade and Transportation sector, although this was not true in previous years and is unlikely to be true during 2010. Annual data from 2010 will be available in May 2011.

## GOVERNMENT AND PRIVATE PAY COMPARISON

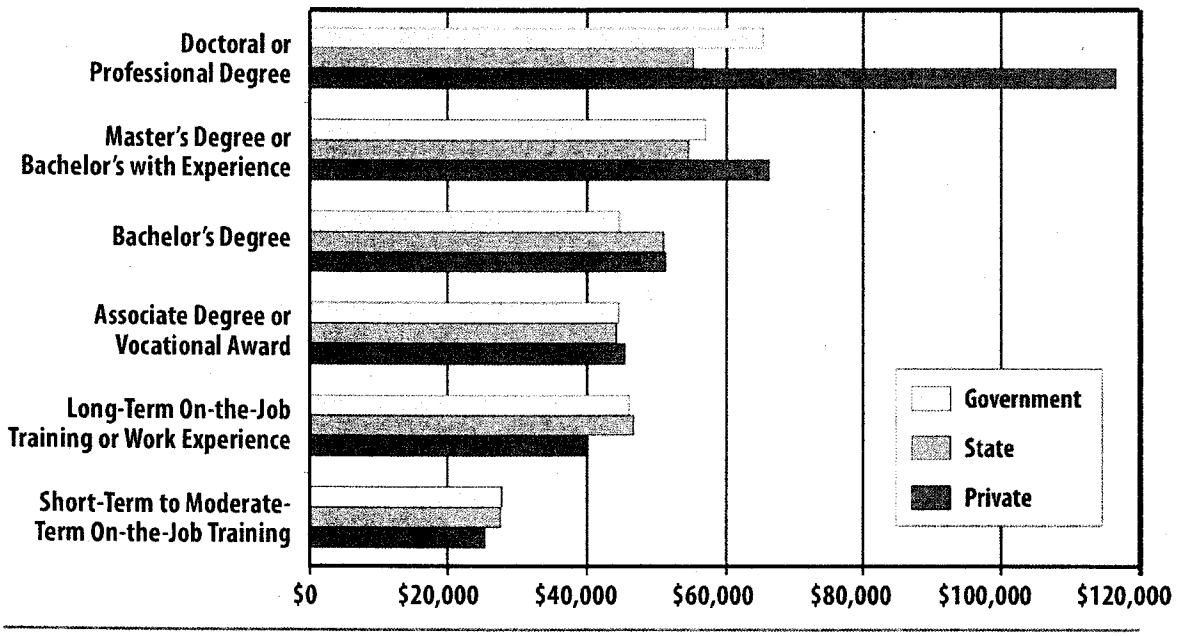
Overall, the average wage for Montana's government workers is higher than private workers. Federal workers had the highest average salary at $57,800 in 2009, followed by state workers with an average salary of $42,900. Local government workers have an average salary of $33,200, and private payroll workers have the lowest average wage at $32,200. However, state workers are more likely to work a full 40-hour work week than private sector workers, thus making the differences in annual salaries greater than the differences in hourly wages.

Over 66% of Montana state workers (and 73% of all government workers) work 40 or more hours per week. In comparison, only 58% of Montana private sector workers work 40 or more hours.[2]

Comparing simple average salaries also does not take into account that jobs in state government are different than jobs in the private sector and generally require a higher level of education and skills. A large number of private workers are employed in the Retail and Wholesale Trade industry, or the Leisure Activities sector, in jobs that do not require a high level of education or experience, such as retail salespeople, cashiers, fast food workers, or hotel desk clerks. In contrast, most government workers work in the Education, Health Care, or Public Administration industries in jobs that require higher levels of education and experience, such as nurses, professors, researchers, and program administrators. In a free market, workers with higher levels of education and experience are paid more because highly skilled workers are more efficient and contribute a greater amount of value to their business and the economy.

Figure 3 compares the average annual salary of public and government workers in Montana by the minimum level of education and experience required to complete the job using Occupational Employment Statistics data from the Bureau of Labor Statistics. Government sector jobs have higher wages in occupations that only require a low level of education, but workers in jobs requiring a bachelor's degree or higher earn more in the private sector than in government. For example, state workers with a master's degree or a bachelor's degree with more than five years experience make $13,500 less than similarly educated workers in the private

**Figure 3. Montana Average Wages by Class and Required Education Level**




[2]Montana 2009 annual average from the Current Population Survey, a joint survey between the U.S. Census Bureau and the Bureau of Labor Statistics, via Data Ferret software at www.dataferret.census.gov. Analysis performed by the Research and Analysis Bureau of the Montana Department of Labor and Industry.

sector. State workers in jobs that require a bachelor's degree make about $1,500 less than private sector workers in similar jobs. For jobs requiring a doctoral or professional degree, the private sector pays over $50,400 per year more than state government.

The large pay differential between sectors in the highest education category is because the majority of doctoral jobs in the public sector are postsecondary teachers, who accept lower wages for a more flexible work schedule or to pursue research in their chosen field, while the majority of jobs in the private sector are doctors, which is an occupation in high demand because of growth in the health care industry. Greater wage differentials are expected at higher education levels because these workers are highly specialized and cannot easily transfer to a different occupation that pays higher wages. For example, professors could earn higher wages in the private sector as doctors, but would have to undergo years of medical training with low wages first. In contrast, occupations at lower skill levels are less specialized and have greater transferability to the private sector. An accountant working in government could find a similar job in the private sector to gain higher wages.

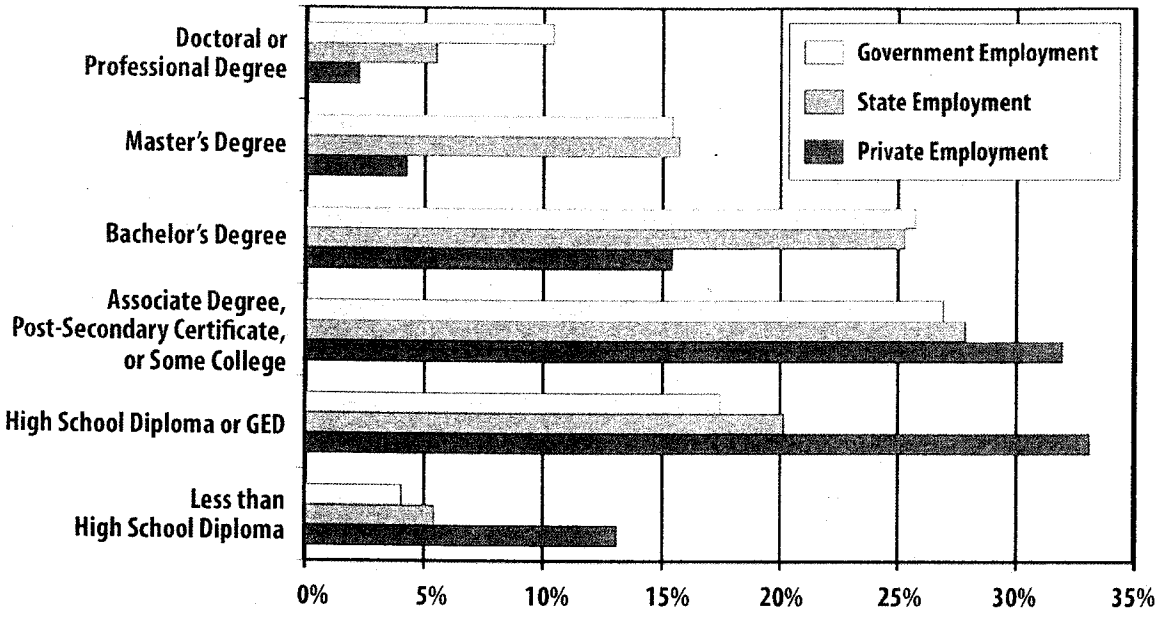
In contrast to the outcome for highly-skilled workers, the government sector pays slightly better in jobs that require only on-the-job training or work experience (likely combined with a high school diploma). This outcome is consistent with federal research on comparable pay between state and private sector compensation.[3] State wages likely are higher in these categories because many low-skill private sector workers lost their jobs during the recession. The reduced demand for low-skilled labor in the private sector resulted in a lower average wage. The government industry lags behind the recession (maintaining jobs during the recession, then experiencing employment losses post-recession). Further, in lieu of a pay raise for all employees, the 2009 Montana Legislature provided for a one-time lump sum payment for all state workers making less than $45,000.

Despite earning greater education premiums than government workers, private workers still earn less in terms of average salaries. This apparent contradiction is explained by Figure 4, which illustrates the educational distribution of Montana's payroll employment for private, government, and state government workers. Private employment falls largely in the lower education categories, which receive lower wages than higher skill categories.

Private employment in Montana is heavily concentrated in the lower education categories, with 78% of private jobs requiring less than a bachelor's degree. Because the majority of private employment falls within the low-skill, low-wage categories, the average private sector wage is comparatively low. In contrast, government jobs require higher levels of education. Over 25% of state government jobs require a master's degree or higher, while only 6% of private sector jobs require a graduate degree. In short, state workers have higher average wages because they have higher levels of education and training than private sector employees.

[3] Bender, Keith and Heywood, John. "Out of Balance: Comparing Public and Private Sector Compensation over 20 Years," Center for State and Local Government Excellence, April 2010.

**Figure 4. Montana Private and Government Payroll Employment by Education Category**




One way to adjust for differences in the education and skill requirements of private and government jobs is to compare rates of hourly pay within the same occupation. For example, using data from the Occupational Employment Statistics from the Bureau of Labor Statistics, pay for a private electrician can be compared to an electrician working for state government. Both of these electricians likely have similar levels of education and training. Using the hourly pay also accounts for differences in the number of hours worked per week. Using this information, there are only eight occupations where the average wage is greater in state government than in the private sector. Employment in these occupations represents 1.5% of Montana's total payroll employment. These occupations are listed in Figure 5 (next page).

In other words, only 1.5% of Montana's workers work in occupations where the average salary is higher in state government than in the private sector. In comparison, 3.7% of Montana's workers work in occupations where the average salary is higher in the private sector, and the majority of workers (94.8%) work in occupations where the average wages in state government and the private sector are statistically equal.

In a free labor market, where workers are paid based on market dynamics and where workers are easily able to move between the private and public sectors, pay between private industry and the government sector should be relatively the same. The above data indicate that pay between the private and public sector in Montana is the same for 95% of Montana's workers, with 3.7% of Montana workers earning higher private pay than those in a similar government position. Although highly educated workers in the private sector earn significantly higher wages than their counterparts in the government sector, positions that require an advanced degree tend to be specialized. In these specialized positions, workers are not able to easily move between sectors, thus resulting in the private pay premium.

**Figure 5. Occupations where the Average Wage is Higher in State Government than the Private Sector in Montana, 2009**

| | Total Employment | Percent Government | Private Average Wage | State Average Wage |
|---|---|---|---|---|
| Social and Community Service Managers | 500 | 22.6% | 17.96 | 29.54 |
| Database Administrators | 220 | 25.5% | 23.07 | 28.72 |
| Engineers, All Other | 270 | 82.8% | 21.51 | 35.06 |
| Mental Health Counselors | * | * | * | 21.31 |
| First-Line Supervisors/Managers of Correctional Officers | 120 | 71.1% | 18.51 | 24.95 |
| First-Line Supervisors/Managers, Protective Service Workers, All Other | 80 | 58.5% | 16.03 | 27.95 |
| Stock Clerks and Order Fillers | 4,360 | 2.6% | 10.53 | 16.46 |
| Service Station Attendants | 480 | 8.0% | 10.13 | 18.35 |

Source: Occupational Employment Statistics, 2009. Analysis performed by the Research and Analysis Bureau, Montana Department of Labor and Industry

* Confidential Information

## BENEFITS

Of course, the above comparisons between government and private sector pay considers only wages, not the total compensation package including benefits, bonuses, stock options, retirement, or paid time off. Statistics on the size of the total compensation package are not collected and published on a regular basis in Montana. National statistics from the first quarter of 2009 indicate that state and local governments have a total compensation rate (including benefits) of $39.51 compared to $27.46 in private industry. Approximately 29% of the private compensation package is in the form of benefits, while 34% of the state and local government compensation package is in benefits.[4]

However, Montana state government employees receive benefits at a much lower rate than the national average. With an average salary of $42,892 in 2009, retirement benefits equal to 7.17% of pay, and health and other benefits equal to $8,148 per employee, the average total compensation is about $54,116.[5] Benefits comprise about 21% of the Montana state government total compensation package compared to 34% nationally.

Although data is not available for comparison, it is likely that the national statistics also overestimate the benefits package for Montana's private sector as well. Benefits are positively related to the size of the employer, with employees in larger businesses receiving larger benefits packages. The average business size is smaller in Montana than in the nation, so it seems likely that Montana's private sector benefits trail behind the national average.

[4]The data comes from the National Compensation Survey, which includes data gathered in Montana's metropolitan statistical areas of Billings and Missoula. More recent data if available, but errors were found in the state and local government series starting in June 2009. These errors will be corrected by the end of Jan. 2011.

[5]Benefits information from the Montana Department of Administration for health and other benefits, while the Montana Public Employees Retirement Administration provided the percentage for employee retirement benefits.

Other research has used the national averages to adjust for total compensation in Montana, even though this data does not adequately represent Montana's pay scenarios.[6] Using the national ratios similarly to this other research, the private sector wage premium would decrease for all education levels except workers in jobs requiring a doctoral or professional degree. The private sector premiums for wages and total compensation are shown in Figure 6, with positive values indicating that the private sector earns more than state government, and negative values indicating that state government workers earn more. These figures should be viewed with great skepticism because the national averages do not adequately represent Montana, but are provided for comparison to other studies.

**Figure 6. Total Compensation Comparison Between Private and State Government Sectors Using National Ratios** (***National ratios do not represent Montana compensation ratios***)

| | Wages | | Total Compensation | | Private Sector Pay Advantage* | |
|---|---|---|---|---|---|---|
| | Private | State | Private | State | Wages | Total Compensation |
| Short to moderate-term on-the-job training | $25,703 | $27,784 | $36,287 | $42,232 | -$2,081 | -$5,945 |
| Long-term on-the-job training or work experience | $39,832 | $43,642 | $56,235 | $66,335 | -$3,809 | -$10,100 |
| Associate Degree or Vocational Award | $39,755 | $39,204 | $56,126 | $59,590 | $551 | -$3,464 |
| Bachelor's Degree | $49,946 | $48,485 | $70,514 | $73,697 | $1,462 | -$3,182 |
| Master's Degree or Bachelor's with experience | $67,817 | $54,340 | $95,743 | $82,596 | $13,477 | $13,147 |
| Doctoral or Professional Degree | $105,493 | $55,095 | $148,935 | $83,744 | $50,398 | $65,191 |

Source: Occupational Employment Statistics, National Compensation Survey.

*Negative numbers indicate that state government workers earn more. Total compensation figures should be viewed with skepticism because the national ratios do not represent actual Montana compensation rates.

Private sector workers in jobs requiring a bachelor's degree with experience or an advanced degree would still be paid more than their state government counterparts. For those with a doctoral or professional degree, the gap between state government and the private sector actually increases, with workers in the private sector making an average of $65,200 more than their state government counterparts.

## GROWTH IN MONTANA WAGES AND INCOME SINCE 2001

What would have happened if the state pay was indexed to either income or wages during the last decade? For the full timeframe of 2001 to 2009, the average wage for a state employee increased by 4.1%, slightly more than the increase in per capita income (4.06%) and more

[6]Cato Institute, January 2010 Employee Compensation in State and Local Governments, http://www.cato.org/pubs/tbb/tbb-59.pdf. and Bender and Heywood, 2010 (ibid)

than the increase in household income (3.7%). In other words, if state pay was indexed to per capita income in 2001, the average state government wage would have grown an average of 4.06% a year, ending at $42,763 in 2009 (about $129 less than the actual wage). If indexed to median household income in 2001, the average state wage would be $39,625 (about $3,270 less than the actual 2009 wage). These figures are shown in Figure 7.

**Figure 7. Montana Average Wages and Per Capita Income and Wages from 2001 to 2009**

| | Per capita Income | Median Household Income | Private Sector Average Wage | State Pay Average Wage | Total Government Average Wage | Total Average Wage |
|---|---|---|---|---|---|---|
| 2001 | 25,314 | 33,151 | 24,122 | 31,112 | 29,463 | 25,195 |
| 2002 | 25,685 | 34,105 | 24,813 | 33,025 | 30,741 | 26,001 |
| 2003 | 27,000 | 34,449 | 25,659 | 34,025 | 31,853 | 26,907 |
| 2004 | 28,616 | 35,574 | 26,610 | 34,261 | 32,788 | 27,830 |
| 2005 | 30,144 | 38,503 | 27,936 | 35,080 | 34,262 | 29,150 |
| 2006 | 32,177 | 40,299 | 29,386 | 36,965 | 35,841 | 30,596 |
| 2007 | 33,897 | 43,000 | 30,954 | 39,624 | 37,892 | 32,224 |
| 2008 | 35,237 | 43,948 | 31,928 | 42,741 | 39,375 | 33,305 |
| 2009 | 34,794 | 42,222 | 32,247 | 42,892 | 39,969 | 33,762 |
| **Compounding Annual Growth Rates** | | | | | | |
| 2001-2009 | 4.06% | 3.07% | 3.70% | 4.10% | 3.89% | 3.73% |
| 2008-2009 | -1.26% | -3.93% | 1.00% | 0.35% | 1.51% | 1.37% |
| 2001-2007 | 4.99% | 4.43% | 4.24% | 4.11% | 4.28% | 4.19% |

Source: Per capita income from the Bureau of Economic Analysis. Median Household Income from the U.S. Census compiled by the Census and Economic Information Center at the Montana Department of Commerce. Average wages from the Quarterly Census of Employment and Wages compiled by the Research and Analysis Bureau, Montana Department of Labor and Industry.

However, this outcome is highly dependent on whether the recession years from 2007 to 2009 are included in the analysis. Wage and income growth slowed significantly during the recession to 1% growth in the private sector and 0.35% in state government (from 2008-2009), with losses in both income measures. During normal economic times from 2001 to 2007, both income measures and private sector pay grew more quickly than state wages. Tying state wages to either of these measures would have resulted in higher overall wages in 2007. Had state wages been indexed to the median household income from 2001 to 2007, state wages in 2007 would have been $730 higher than the actual average wage. Had state wages been indexed to private sector pay in 2001, the state average wage would have grown 0.13% faster, resulting in a higher average pay for state workers of approximately $300 in 2007.

## INCOME MEASURES COMPARED TO WAGE MEASURES

Personal or household income measures are very different from wage income. Income measures include income from many different sources, including retirement distributions, self-employment, dividends, rent, unemployment benefits, and welfare benefits. For example, wage and salary income comprised only 45% of personal income in Montana during 2009.[7] Average household income is even further disconnected from the average wage because a household may have zero, one, two, three, or more wage earners. An increase in household size would increase the average household income without any change to the average wage. The official Census definition of household income includes all income earned by any household member 15 years and older.

Through existing market and government pay system mechanisms, the state average wage is already linked to the income measures in the state. As mentioned above, a free labor market with easy transfer between government and private jobs will result in an equalization of wages between the private and public sectors. The state pay system encourages agencies to consider job-related qualifications, existing pay relationships within the agency and work unit, ability to pay, and external competitiveness when developing their pay strategies. Market data is used to measure external competitiveness. State pay is also impacted by income. If income does not increase, tax revenues also do not increase. Shortfalls in the state budget are often remedied by freezing state pay. In this manner, state pay is already linked to changes in income.

## RANGE OF STATE AND PRIVATE PAY

From 2001 to 2009, the average private wage increased by an annual compounding rate of 3.7%, while the government average wage increased by 3.8%. It is mathematically possible that the average wage increased because high-earners experienced large wage increases, but low income workers simply maintained their wages.

However, uneven wage increases did not happen in Montana. In fact, during the period from 2002-2009, the median wage grew at roughly the same amount as the mean wage (3.3% for the median and 3.2% for the mean). In other words, low-wage earners experienced wage increases at the same rate as high income earners. The range of wages also did not change significantly, as shown in Figure 8. In 2002, wage earners in the lowest wage decile earned $6.39 per hour, or 26.6% of those in the highest earning decile. (A decile is equal to 10% of the total number of workers.) The percentage difference between the lowest earners and the highest earners is relatively equal in 2009, indicating that the distribution of pay has not changed significantly since 2002. Wage growth for low-wage earners has been similar to high-wage earners in both the private and state government sectors.

[7] U.S. Bureau of Economic Analysis, 2009 annual averages.

**Figure 8. Distribution of Hourly Wages in Montana, 2002 to 2009**

| | Total Employment | | Private Employment | | State Government Employment | |
|---|---|---|---|---|---|---|
| | 2002 | 2009 | 2002 | 2009 | 2002 | 2009 |
| 10th Percentile | 6.39 | 7.71 | 6.24 | 7.62 | 9.22 | 10.29 |
| 50th Percentile | 11.10 | 13.65 | 10.13 | 12.82 | 16.29 | 19.15 |
| 90th Percentile | 24.06 | 29.56 | 23.19 | 28.78 | 29.51 | 33.19 |
| Ratio of 10th to 90th | 26.6% | 26.1% | 26.9% | 26.5% | 31.2% | 31.0% |

## COMPARISON TO OTHER STATES

Data from the National Compensation Survey indicate that the private sector hourly wage in Montana is more comparable to the national average than the hourly state average rate. Montana private sector average hourly wage in 2009 was approximately 83.8% of U.S. private wage, while state and local government were at only 68.5% of the national average.

However, when considered as average annual pay, the differentials change because of a higher percentage of part-time work in the private sector. Montana's private sector average wage is approximately 71% of the national average, while the state average wage is 88% of the national average. In general, state government workers are more likely to work a 40-hour work week, while Montana's private sector has more part-time jobs. According to the Current Population Survey, 41.5% of Montana's private sector workers work less than 40-hours per week, while only 27% of all government workers and 34% of state government workers work less than 40-hours. Working fewer hours reduces the annual salary of private workers.

In terms of rankings, Montana's average state salary ranks 37th in the nation for 2009, while our average wage ranked 51st (including all states and the District of Columbia). Although this seems like a large gap, the pay disparity between the private and the public sector is not as large as in many states. For example, Iowa ranks 8th in the average wage for state government at $56,033, but ranks 41st for private sector wages at $36,309. This gap between the private and public sector wages is much larger in Iowa ($19,720) than Montana ($10,650). Other states also have larger gaps. As shown above, the difference is largely due to industry mix, full-time versus part-time work, and the education and skills required for the jobs.

A recent study by researchers at Columbia University compared the rates of pay in the private and government sector for all 50 U.S. states in order to calculate the number of excess state government jobs and the amount of excess pay in each state.[8] The research used advanced statistical methods to control for the demand for government services, such as population, poverty rates, state Gross Domestic Product, and the number of local government employees

[8] Huber, John and Phillips, Justin. 2010. "Identifying states with the most (and least) justification for paring state public employment costs." www.columbia.edu/~jhp2121/workingpapers/StateEmployees.pdf

who can substitute for state workers. The research calculated that the state government pay in Montana is 1.2 to 1.8% higher than expected given its characteristics, resulting in excess payrolls of approximately $10 to $16 million. However, the research also found that Montana employees are more productive than expected given the demand for government services. Montana has 780 to 2,340 fewer state full-time employees (FTE) than expected given the demand for government services in the state. At an average cost of about $54,116 per FTE including benefits, adding this number of workers would increase payrolls by $42.2 million to $126.6 million (for 780 to 2,340 FTE respectively).

Economic theory indicates that workers get paid according to the value they contribute to their employer, meaning that more productive workers earn higher rates of pay. The Columbia research suggests that Montana's excess wages, estimated at $16 million, are due to higher-than-average productivity, which the study valued at up to $126.6 million. A reduction in state worker pay may reduce this productivity by decoupling pay from performance and causing the most productive workers to find better-paying jobs in the private sector. Because of this productivity decrease, either the quantity and quality of government services would decrease or the state would need to hire more FTE to provide the same level of government services.

## GEOGRAPHICAL IMPACT OF A CAP ON STATE PAY

Legislative proposals to cap state worker pay have been discussed for consideration by the 2011 Legislature. One proposal garnering significant media attention aims to cap state compensation at twice the level of median household income. Although the definition of median household income used in this analysis differs from the legislative proposal, a cap that limits pay and health benefits to twice the median household income would truncate the wages of state workers at $78,030 per year.

Based on data from the Department of Administration, a cap truncating the state salary distribution at $78,030 would result in a total pay decrease of $13.3 million, with $7.7 million wages lost in Lewis and Clark County. Jefferson, Deer Lodge, Missoula, Yellowstone, and Cascade Counties will also have wage income losses of over $450,000. The proposal would decrease the wages of about 740 state workers, with about 460 of these workers being located in Lewis and Clark County and 63 in Jefferson County. The average pay decrease would be 18% for the workers above the cap.

Wage decreases of $13.3 million may underestimate the impact of the cap because workers earning less than this amount will likely face limits on future wage growth in order to maintain pay differentials for more productive workers. For example, an economist in the Research and Analysis Bureau will likely still earn less than the Bureau Chief, who will still earn less than the Division Administrator, who will still earn less than the Commissioner.

The economist will also experience an effective wage cap that is likely to be significantly less than $78,030. Therefore, although the intent of the legislation appears to be to truncate the distribution of state worker pay by imposing a cap, it is likely that this cap will actually cause a compression of wages and will also impact workers earning less than the cap.

## FOLLOW UP QUESTIONS

Although this fact sheet attempted to be exhaustive in addressing the aspects of private and public pay in Montana, other questions will certainly arise. The Research and Analysis Bureau will continue to answer any additional questions from interested parties about state pay and will update this report if appropriate.